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# A Phenomenological Study on the School Concept of the Children Attending the Forest School

## Orman Okuluna Devam Eden Çocukların Okul Kavramına Yönelik Fenomenolojik Bir Araştırma

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**Öz.** Söz konusu bu araştırma okul öncesi eğitimini orman okulunda alan çocukların okul fenomuna yönelik deneyimlerini anlamayı amaçlamaktadır. Bu amaç doğrultusunda araştırma 32 çocuktan oluşan bir çalışma grubuyla yürütülmüştür. Araştırma nitel araştırma yöntemlerinden biri olan fenomenoloji modeli esas alınarak yürütülmüştür. Araştırmanın verilerini çocukların okul hakkındaki çizimleri ve çizimlerine dair yapılan görüşme kayıtları oluşturmaktadır. Elde edilen veriler post-pozitivist felsefe temelinde araştırmacı merkezli yöntemlerden biri olan üçgenleme tekniğine dayalı olarak analiz edilmiştir. Araştırma sonucunda çocukların ormanı bir mekân olarak algıladıkları ve bu şekilde deneyimledikleri tespit edilmiştir. Orman okullarının çocuk-doğa ilişkisi, keşif duygusu, arkadaşlık ilişkileri ve oyunun çocuğun okul hayatındaki yeri açısından güçlü yönlerinin varlığı tespit edilmiştir. Ayrıca çocukların önemli bir bölümü orman okulunda kendilerini iyi hissettiklerini belirtmişlerdir. Tüm bu sonuçlardan hareketle araştırmacılar farklı paydaşlarla yürütülen çalışmaların önemine dikkat çekmekle birlikte orman okulunun okul denilen fenomu yeniden şekillendirebileceğini ve bunun araştırılmaya değer olduğunu düşünmektedirler.

**Anahtar Kelimeler:** Orman okulu, okul fenomu, çocuk, fenomenoloji.

**Abstract.** The current study aims to understand the experiences of the preschool children attending forest school in relation to the school phenomenon. To this end, the current study was conducted on a study group comprised of 32 children. The study was carried out on the basis of the phenomenological model, one of the qualitative research methods. The data of the study were collected through the children's drawings and interviews. The collected data were analyzed by using the triangulation technique, one of the researcher-centered methods built on post-positivist philosophy. As a result of the study, it was concluded that the children perceive the forest as a place and experience it in this way. The forest schools were found to have some strengths in terms of child-nature relationship, sense of discovery, friendship relations and the place of the play in the child's school life. Moreover, a significant number of children stated that they feel good in the forest school. On the basis of all these findings, the researchers point out the importance of the studies to be conducted with different associates and it can be argued that the forest school can reshape the phenomenon called the school and that this is worth researching.

**Keywords:** Forest school, the phenomenon of school, child, phenomenology.

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## Introduction

While in the past, there were many opportunities for children to spend time outdoors, nowadays, especially in big cities, this is not much possible. Instead, children are provided with spaces surrounded by concrete walls at home, on the street and in the school (Davis, 2014). Children get distanced from their natural areas and are raised with the tablet, telephone and television trio in closed spaces that are devoid of nature and naturalness (Palmer, 2018). This has many negative effects on children. Attention disorder, hyperactivity, emotional dissatisfaction, lack of social skills, emotional-behavioral problems such as depression (Louv, 2016; Tranter & Pawson, 2001) are accompanied by physical health problems such as obesity and high cholesterol (Ebbeling, Pawlak & Ludwig, 2002).

The increasing number of electronic items around children and the fact that they spend most of their lives in indoor places have given rise to the necessity of reviewing the practices in the field of early childhood education (Brundrett, 2012; Connolly & Haughton, 2017). Limitedness of the learning environments within the school and the changing perception of the child and learning in this century also influenced educational policies, allowing teachers, academics and program development experts to discover the restrictive effect of school curricula limited by closed spaces on children's learning (Bergen, 2017; Rivkin, 1995).

Another important issue to be emphasized at this point is the importance of play in terms of children's present and future lives. Scientific research in many fields, such as child development, psychology, educational science and medical sciences, suggests that playing fosters the healthy development and learning of the child (Bergen, 1988; Sutterby & Frost, 2014). It is clear that the more affectively children use their senses in the learning process, the more permanent learning takes place. This means that during the play where learning potential is optimal, it is important to activate for more than one of the senses of vision, hearing, smell, touch and taste; if possible all together (Brooker, Blaise & Edwards, 2014). Children can play anywhere, anytime, but they require a rich stimulating environment to be able to capitalize on the potential benefits of play. As such, child-centered and play-based curriculum should be implemented in pre-school education institutions (Bredekamp, 2014).

Known as a child-centered and play-based alternative approach in early childhood, forest schools also offer children a variety of opportunities to experience learning outside of the classroom (Knight, 2011). Forest schools benefit from natural environments to conduct play-based learning activities, aiming to improve children's problem-solving and collaboration skills, self-esteem, intrinsic motivation and self-confidence (Knight, 2009; O'Brien, 2009). Forest schools contribute to the health and physical development of children, strengthen their positive attitudes towards learning and help children develop their life skills by allowing them to explore, to play in a rich, stimulating and flexible natural environment, by emphasizing learning through direct experiences and by encouraging children to take appropriate risks (Maynard, 2007).

The idea that the child's learning process is more enjoyable and permanent in nature with the ties established with nature goes back to Frobel, the founder of preschool education (North American Association for Environmental Education, 2010). The Forest School movement first emerged in Scandinavia in the 1950s and gradually spread throughout Europe and the UK (O'Brien & Murray, 2007). This approach, which was later adopted in Canada, the USA and

Japan (Sobel 2014), now affects nature education initiatives in New Zealand and Australia (Elliott & Chancellor 2014).

The philosophical approach that nurtures the practices of the forest school coincides with many principles of early childhood education (Kenny, 2013). Forest schools are long-term establishments built in a forest or a natural environment having periods that are continuous rather than a school visits once or occasionally in order to support a strong bond between children and natural life. Forest schools, which adopt a learner-centered approach, aim to ensure a holistic development of everybody in the school by encouraging students to be flexible, self-confident, independent and creative (Forest School Association, 2007; Knight, 2009).

The most characteristic and important feature of forest schools in terms of early childhood education is the developmentally appropriate learning environment created by children to start their own learning process. The most important feature that differentiates the practices in the forest school from other outdoor activities is that as mentioned above, learning process is started by the student and that it is a pedagogical approach allowing the student to explore his/her environment like an explorer in line with his/her interests and curiosity (Knight 2009, 2012, 2013; Mackinder, 2017; Williams-Siegfredson 2012). Young children, who can benefit from the forest school approach, have countless possibilities to improve their understanding of the natural environment in this discovery process. They are able to involve the development of basic elements of life such as trees, plants, soil, animals, air and water into the learning processes (Kahriman-Pamuk, 2019). Ridgers, Knowles and Sayers (2012) and Nawaz and Blackwell (2014) reported that children's experiences in natural environments have positive effects on their environmental awareness. In addition, children who spend time in the forest can also improve their skills such as imagination and creativity through unstructured play experienced through natural materials (Wilson 2012).

Another feature that distinguishes forest school practices from other approaches is the risky play opportunity offered to children. Risky play provides children with options such as climbing great heights and jumping down from there, jumping, remaining in balance on high objects, high-speed swaying, gliding, running, using dangerous tools such as knives, hammers, ropes (Sandseter, 2007, 2009a, 2009b). During these risky games that are played with excitement and enthusiasm, children recognize their environment and self, test their boundaries, have self-confidence, become resilient, act independently, solve problems, create cause-effect relationships, manage risk and avoid dangerous situations, balance their senses of fear and fun, overcome their phobia and develop audio-motor and creative thinking skills (Little, 2015; Little & Wyver, 2008; Little & Eager, 2010, Sandseter, 2012). In the case studies conducted with children attending the forest school, O'Brien and Murray (2006) emphasized that attending the forest school has positive effects on their communication and self-esteem while Dowdell, Gray and Malone (2011) found that it has very positive effects on the development of children's cooperation skills. Due to improving social skills of children in forest schools, their relationships with adults have been reported to be improved (Slade, Lowery & Bland, 2013).

To summarize, the forest school supports the development of physical, cognitive, affective and social skills of pre-school children with a holistic approach. The pedagogy of the forest school offers a learning experience fits the nature of the young children as it provides learning experience which is both enjoyable and promotes discovery.

Pre-school education is the child's first learning and school experience. Children experience the first time to act together with a group, or participate in learning activities as a group or under the guidance of an individual leader. School experiences of children in the pre-school period are thought to have an effect on children's perceptions of school and learning. Aksoy and Baran (2010); in their study focusing on preschoolers' perceptions of school, emphasize that the content of preschool education environments is influential on their perceptions of school and that children should be introduced to preschool education environments which are sufficient in terms of quality and quantity. Geyik, Çalışkan and Bay (2018) conducted a study on pre-school children's perceptions of school and they reported that while the majority of the children have positive perception of school, this perception does not differ depending on the gender of the children and whether they are enrolling pre-school education. It was also emphasized by Kanyal and Cooper (2010) that it is important to explore the opinions of preschool children on different educational approaches.

Thus, it seems to be important to examine and understand the experiences of children attending forest kindergartens, which are an alternative approach, to fill this gap in the literature. Another point that makes this research important both at international level and in Turkey is that it elicits a portrait of the reflection of the forest school pedagogy, which has become a popular childhood education approach in recent years, on children. With the last regulation made in 2013 about pre-school education in our country, it was emphasized that the child should be in the center of education. In this context, determining the opinions of children who are the main stakeholder of pre-school education about the school is also important for the child's right to participate. In the 21st century, society's perception of the child has changed considerably, and children have been seen as active pioneers of many changes in society as citizens of the future. Children's perspectives are influenced by their social, cultural and historical context, and these contexts, such as the school, are shaped according to their existence; therefore, children and the system they are in reciprocally shape each other (Bruner1996; Graue & Walsh 1998; Warming 2005). In light of these discussions, the purpose of the current study was set to be to understand how the children attending forest schools, which refer to an up-to-date and widespread approach, make sense of the concept of school by revealing their school-related experiences.

## Method

### Research Model

The purpose of the current study is to understand the school concept of the children aged 60-72 months attending forest schools. In this phase of the current study, the school which is the central phenomenon of the current study is defined as "*the place where any type of education and instruction is carried out in an integrated manner*" by the researchers (Turkish Language Association, 2019).

Phenomenological studies are conducted to understand the lived experiences of one or more than one person in relation to a phenomenon (Creswell, 2013). Van Manen (1990) expresses the most basic concern of phenomenological research as the reduction of an individual experience-based definition into universal characteristic. Husserl (1931), who forms the basis of the phenomenological research, emphasizes that the most fundamental event in understanding the ideas is the elimination of prejudices. From this point of view, the concept of transcendental

phenomenology has emerged. Moustakas (1994) emphasizes that the perception of a phenomenon as something new for the first time is a basic understanding of transcendental phenomenology. Moustakas (1994) emphasizes that the perception of everything related to a phenomenon as something new encountered for the first time is the basic tenet of transcendental phenomenology. As in the current study, it is aimed to understand how children experience the school as a concept and how they make sense of it, the opinion of each child who is receiving his/her pre-school education in the forest school will be evaluated as free of prejudices. Therefore, the current study was designed as a phenomenology-based qualitative study.

**Setting**

In the forest school where the current research was conducted, a school director, an education expert and four teachers and two assistant personnel are employed**.** A total of 35 children aged 50-70 months are educated in the school. The teacher-child ratio is 17/18 children for two teachers. Apart from the school director conducting the school's administrative affairs, an education expert is recruited to design the curriculum, to monitor its implementation and to coordinate its day-to-day implementation. The school has two staff members assigned separately for indoor and outdoor works of the school such as cleaning and meals. There are two groups of students in the Forest Kindergarten, which is a private kindergarten. Groups were formed on the basis of the students' age. In the school, the national preschool curriculum (MEB, 2013) is followed and the principles of the curriculum are integrated into the pedagogy of the forest school. The flow of the typical daily instruction in the school is as follows:

**Table 1.**

*Daily Schedule of Forest Kindergarten*

| | |
|---|---|
| 08.15 | Opening of the school<br>Free time in the playground<br>Breakfast |
| 08:45 | Yoga-Conscious awareness activities<br>Preparation for the forest |
| 09.30-12.00 | Forest time<br>- Discovery in the forest<br>- Free play in the forest<br>- Non-structured, semi-structured and structured activities in the forest |
| 12.00-13:00 | Lunch |
| 14:00 | Free play or activities in the forest or school.<br>Branch courses (English/Music/Drama) |
| 15.00 | Time for foodstuff<br>Free play |
| 16:30 | Closure of the school |

As can be seen in the Table 1, majority of the daily flow of the curriculum is consisted of free play. In the afternoon, mostly art, music and story-telling activities are performed. Science and math-related opportunities are usually presented as semi-structured during forest visits to children. Every day, each group makes a visit to the forest. While the children only perform eating and large group activities with their own groups, the groups sometimes come together during free play. After each visit to the forest, teachers and children make an assessment of the day in the circle time and plan for the next day. Evaluations made at the end of the day provide

information for the teachers and the education expert about how free the children are during the day, what they experience and what they learn, and data that can contribute to the curriculum development.

The kindergarten is located next to the forest area and has a large outdoor land area. The kindergarten uses an area not restricted with borders within this forest area. The daily flow of the instruction offered in the school occurs in the forest area; in addition, daily forest walks and discoveries are performed. The school garden completely surrounds the school building. In the front side of the school (entrance), there is an empty area, followed by the main road; in the back side and other sides of the school is there the forest area. In the kindergarten having only one main building, children spend almost the whole day outdoor. In winter months, the temperature drops up to -5 degrees and the children can go on spending time outside. Children's spending time in any weather condition is also supported by families. Being outdoor has many benefits for children and teachers. For example, children rarely get sick. Woolen underwear, woolen socks and waterproof clothing (raincoat, pants and rain boots) are among the items kept ready for the children not to be adversely affected by the cold.

There is no classroom inside the school that is used permanently by each group; all classes can be used in common. There is also a kitchen, administrative offices, a teacher's room, a warehouse and a toilet inside the school. Although the garden has direct access from the classes, the main door in the hallway is mostly used. In front of this door is designed a quite broad dressing area. While groups spend their breakfast and lunch hours mostly in the school yard, some days, meals are eaten in the forest where some of the groups get after a short walk. The breakfast and lunch are provided by the school for the children; yet, in the afternoon at about five o'clock, they eat what they have brought from home and some snacks given by the school.

In the school garden, there are two large and four small materials depots, toilets, two sand pits, a slide, a swing, a climbing ladder, a sowing-planting area, wooden benches, open and closed wooden patios, small wooden structures (play house, boat) that can be entered into, wooden and stone sculptures made by a local artist, large trees, shrubs and a wooden amphitheater area.

While the part of the garden surrounded with trees has typical features of a forest such as pits, recesses, wetlands, shrubs, there are some other areas with plank flooring, soil and gravel floorings.

The teachers are in the role of a guide in both the class and the forest area. They intervene in the children very little (in case of an accident or a serious conflict); they only offer their help when required by children. Moreover, the teachers observe children mostly in free play time and sometimes participate in for short periods of time.

**Study Group**

The study group of the current research is comprised of 32 children attending a forest school in the city of Mersin located in the south part of Turkey. The children in the study group come from families with middle and upper middle socio-economic levels. They have been enrolling in forest school for six months when the study conducted. In the construction of the study group,

the homogenous sampling technique was used. Though this method, widely used in qualitative studies, decreases differences between the participants, it was preferred as it facilitates focusing on the target phenomenon and simplifies the analysis process (Miles & Huberman, 1994). Though the reduction of differences is a limitation, as only the children receiving education in a forest school were focused on in line with the general purpose of the current study, this limitation is believed not to have any negative effect on the credibility of the study.

The city of Mersin, where the children live, is one of the Turkey's largest, most cosmopolitan cities and it is also one of the most developed cities in industrial, commercial and humanitarian respects. According to the statistics issued by the Turkish Statistics Institute (2019), the city of Mersin is well over the Turkey average in the fields of education, health, culture and economy. Therefore, the children making up the study group are believed to have better social, humanitarian, health and educational opportunities than their counterparts living in other parts of Turkey. As this has the potential of directly affecting the children's experiences related to the target phenomenon, it is of special importance to the researchers.

**Data Collection**

The data of the current study were obtained from the children's drawings about the concept of school and the follow-up interviews conducted individually with the children to elicit their opinions about their drawings. During the data collection process, first a meeting was held with the children's parents and they were explained that a scientific research would be carried out and their children would be asked to draw within the context of this research. The parents who did not want their children to take part in the study were asked to inform the researchers about this. From the parents allowing their children to participate in the study, consent forms were obtained. At the beginning of the study, children were asked whether they would like to participate in or not and they were told that they could leave the drawing session whenever they wished. The same procedure was also followed in the interviews.

In order to facilitate the data collection from the children, a ready-made document was provided for the children to draw on. This document consists of two parts. The first part was for the drawings to be produced by the children. The second part was for indicating the codes found in the drawing and for the interviewer to take notes. This drawing session was performed with all the children in the class. Various measures were taken to prevent the children from being affected from each other. Each child was individually explained the instructions. The children produced their drawings by using the technique they wished. A high majority of the children used crayons. During the drawing sessions, the children were given the instruction "to draw what they think about school" and no intervention or dialogue was established. In this way, it is aimed to provide trustworthiness of the data. The drawings lasted for about 40 minutes. After the completion of the drawings, one of the researchers asked some questions to children one by one about drawings to determine the codes found in the drawings and these codes were noted down.

Another source of the data is the interviews which are individually conducted with the children. Each interview lasted for 3.48 minutes on average. For the interview, the children were invited to a suitable place in the forest school. This place is a suitable place within the school that meets the minimum requirements of conducting an interview. The interviews with the children were conducted by one of the researchers. The interviewer was someone known by the children and having conducted some instructional and educational activities with the children for a while.

Thus, all the possible influences that could harm the data collection process such as feeling anxious about talking to a stranger and about being alone with a stranger were eliminated.

Considering the developmental characteristics of preschool children, the obtained data could be sufficient for a transcendental phenomenology study. As Moustakas (1994) points out, reflecting participants' thoughts openly makes transcendental phenomenology studies stronger. Ages of children in the study group ranged from 48 to 72 months; hence, their concentration and attention skills have not developed well (Wortham, 2002). In this regard, duration of the interview was sufficient for the researchers. In addition, Berk (2009) emphasizes that verbal methods of self-expression may be limited for preschool children due to characteristics of language and social - emotional development. Therefore, drawing technique used in the research strengthens the structure of transcendental phenomenology.

**Role of Researcher**

The researcher who collected the data has regularly been to the forest kindergarten therefore, she is recognized by children. The data collection process was conducted in the participants' natural environment (forest kindergarten) by a person whom they know strengthened the objectivity of the research. Therefore, the participants could express their experiences more comfortably and reliably. Finally, researchers stand out from their own prior knowledge and experience during the data analysis process to take a role in accordance with the nature of phenomena.

**Data Analysis**

The data collected in the current study were analyzed on the basis of the concept of transcendental phenomenology. In this regard, both the textural and structural description of the collected data was made. According to Creswell (2013), the textural description focuses on the understanding of what the participant has experienced about the phenomenon and the structural description focuses on the understanding of how the participant has experienced it in terms of the state and content. Through the drawings, it was intended to determine the structures remaining in the minds of the students about the concept of school (codes). More clearly, the drawing enables us to understand what the children have experienced about the phenomenon of school and the construction of the school as a result of these experiences in their minds, leading to emergence of textural description.

The interview data were used for the structural description. Through the data collected from the interviews, it was intended to elicit how the children see and experience the phenomenon in terms of the state and conditions in which they are. With both the textural and structural descriptions, it was intended to understand how the phenomenon has taken place in the minds of the children and how they have understood and internalized the phenomenon. All these analyses were conducted with the analysis method developed by Colaizzi (1978). As a requirement of this analysis technique, important sentences in the interview data were determined; in light of them, specific meanings were developed and in light of these meanings, the themes were constructed.

## Credibility

One of the most important problems of qualitative studies is the credibility of the results derived from the findings. There are many methods to ensure this. In this regard, in the current study the researcher employed the triangulation technique built on the researcher-centered post-positivist paradigm. By using the triangulation, the researcher brings various and different resources together and then interprets to elicit evidence to support the finding (Creswell, 2013). Furthermore, Creswell and Miller (2000) contend that the triangulation is a popular credibility technique and this method allows the collection of data via different means and thus in-depth analysis of the collected data.

Within the context of the current study, the data were collected both visually and through the interview technique. In order to complete the triangulation, a person who is a pre-school education expert was assigned as an external observer during the analyses. After the researchers completed their analyses, the opinions of the external observer about the process were sought; moreover, the external observer was also asked to analyze the findings. The agreement between the themes of the researchers and the themes of the external observer was calculated with Kappa Fit Index and it was found to be .92. Thus, it was concluded that there is a considerably high agreement between the external observer and the researchers. In addition, to ensure trustworthiness, the codes in the drawings are presented in detail and a sample drawing is presented. Moreover, the data obtained from the interviews were thematically presented with details.

# Findings

## Findings Obtained from the Drawings

Within the context of the current study, the children were asked to draw what comes to their minds when they hear the word “school”. The codes obtained from the drawings produced by the children are given in Table 2.

**Table 2.**

*Codes from Drawings*

| **Codes** | **Female** | | **Male** | | **Total** | |
|---|---|---|---|---|---|---|
| | *f* | % | *f* | % | *f* | % |
| Biotic factors | | | | | | |
| Tree | 9 | 52.9 | 8 | 47.1 | 17 | 100 |
| Grass | 5 | 50 | 5 | 50 | 10 | 100 |
| Forest | 0 | 0 | 3 | 100 | 3 | 100 |
| Plant | 2 | 66.7 | 1 | 33.3 | 3 | 100 |
| Flower | 8 | 80 | 2 | 20 | 10 | 100 |
| Cactus | 1 | 100 | 0 | 0 | 1 | 100 |
| Carrot | 0 | 0 | 1 | 100 | 1 | 100 |
| Butterfly | 4 | 100 | 0 | 0 | 4 | 100 |

**Table 2. (continued)**

| | | | | | | |
|---|---|---|---|---|---|---|
| Insect | 2 | 66.7 | 1 | 33.3 | 3 | 100 |
| Spider | 2 | 66.7 | 1 | 33.3 | 3 | 100 |
| Snail | 3 | 75 | 1 | 25 | 4 | 100 |
| Bird | 5 | 83.3 | 1 | 16.7 | 6 | 100 |
| Eagle | 1 | 100 | 0 | 0 | 1 | 100 |
| Fly | 0 | 0 | 1 | 100 | 1 | 100 |
| Bee | 0 | 0 | 1 | 100 | 1 | 100 |
| Worm | 3 | 100 | 0 | 0 | 3 | 100 |
| Dog | 0 | 0 | 1 | 100 | 1 | 100 |
| Cat | 1 | 50 | 1 | 50 | 2 | 100 |
| Horse | 1 | 100 | 0 | 0 | 1 | 100 |
| Crocodile | 0 | 0 | 1 | 100 | 1 | 100 |
| Snake | 1 | 100 | 0 | 0 | 1 | 100 |
| Rabbit | 1 | 100 | 0 | 0 | 1 | 100 |
| Abiotic factors | | | | | | |
| Sun | 8 | 53.3 | 7 | 46.7 | 15 | 100 |
| Cloud | 6 | 46.2 | 7 | 53.8 | 13 | 100 |
| Log | 1 | 100 | 0 | 0 | 1 | 100 |
| Sky | 2 | 40 | 3 | 60 | 5 | 100 |
| Stone | 1 | 33.3 | 2 | 66.7 | 3 | 100 |
| Soil | 5 | 71.4 | 2 | 28.6 | 7 | 100 |
| Human | 7 | 77.8 | 2 | 22.2 | 9 | 100 |
| Artificial Environment | | | | | | |
| School (Building) | 1 | 50 | 1 | 50 | 2 | 100 |
| Tent | 6 | 66.7 | 3 | 33.3 | 9 | 100 |
| Car | 0 | 0 | 2 | 100 | 2 | 100 |
| Ship | 0 | 0 | 1 | 100 | 1 | 100 |
| Plane | 0 | 0 | 1 | 100 | 1 | 100 |
| Classroom | 0 | 0 | 1 | 100 | 1 | 100 |
| Schoolyard | 1 | 25 | 3 | 75 | 4 | 100 |
| Sandbox | 3 | 50 | 3 | 50 | 6 | 100 |
| Toy | 0 | 0 | 1 | 100 | 1 | 100 |
| Harrow | 1 | 100 | 0 | 0 | 1 | 100 |
| Shovel | 1 | 100 | 0 | 0 | 1 | 100 |
| Symbol | | | | | | |
| Heart | 1 | 100 | 0 | 0 | 1 | 100 |
| Bubble | 1 | 100 | 0 | 0 | 1 | 100 |
| Fact of Nature | | | | | | |
| Rain | 3 | 60 | 2 | 40 | 5 | 100 |
| Lightning | 1 | 50 | 1 | 50 | 2 | 100 |
| Wind | 2 | 50 | 2 | 50 | 4 | 100 |
| Mist | 1 | 100 | 0 | 0 | 1 | 100 |
| Rainbow | 3 | 75 | 1 | 25 | 4 | 100 |

As can be seen in Table 2, a total of 47 different codes were derived from the drawings produced by 32 children making up the study group. These derived codes were subsumed under the sub-dimensions of biotic factors, abiotic factors, artificial environment, symbols and natural events. Biotic factors sub-dimension includes living things, abiotic factors sub-dimension includes life-supporting factors, artificial environment sub-dimension includes man-made media or objects, natural events sub-dimension includes the natural events depicted in the drawings and finally symbols sub-dimension includes the symbols indicating emotions in the drawings.

The most frequently produced codes by the children in their drawings are tree (*f*=17), sun (*f*=15) and cloud (*f*=13). They are followed by grass (*f*=10) and flower (*f*=10). The most frequently depicted codes are in the biotic and abiotic factors sub-dimensions. There are many codes only once depicted in all the drawings and majority of them are in the artificial environment sub-dimension. One of the findings remarkable is that animals are depicted in great diversity in the biotic factors sub-dimension. In general, it is noteworthy that trees and animals are associated with the school by the children who are trained in the forest school.

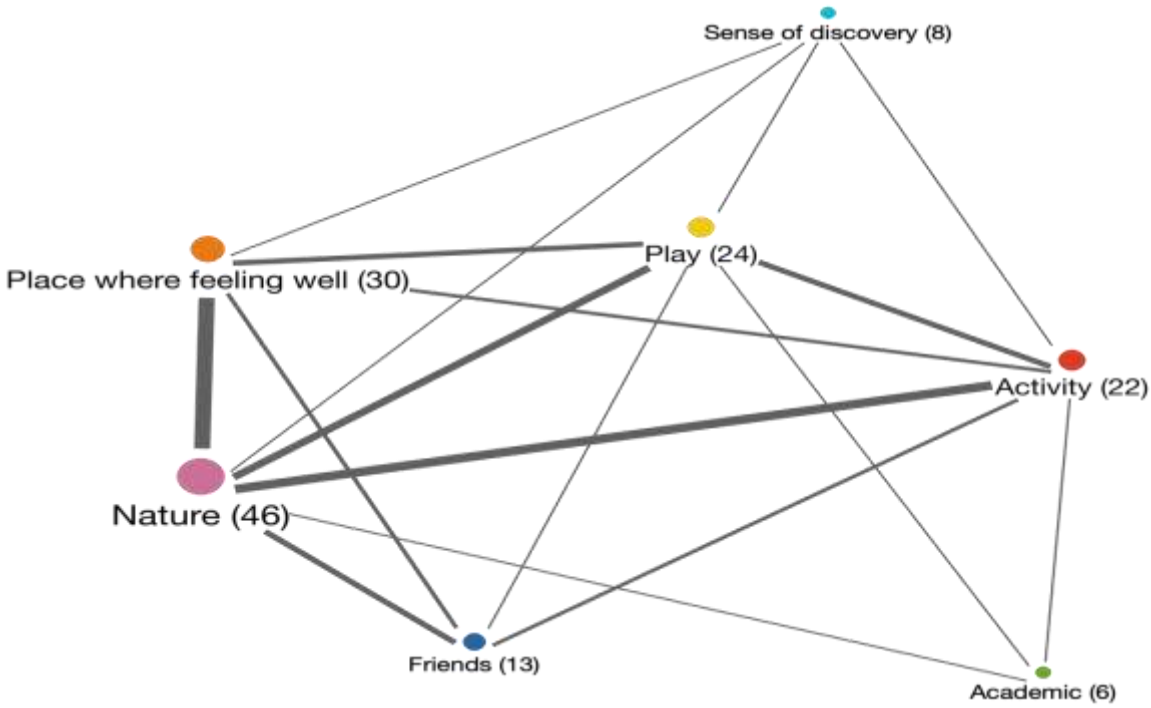
Another important finding is that while the children were depicting natural events in their drawings, they depicted them in closed areas such as school (*f*=2) or classroom (*f*=1) to a considerably small extent. Thus, it can be thought that the generally accepted experience of school does not find much place in the school experiences of the children. In the artificial environment sub-dimension, the most frequently produced code is tent (*f*=9). The tent is the closed area of the forest school where they receive their education. Thus, it can be thought that the children have not internalized the tent within the general definition of the school phenomenon and perceive it differently. One sample drawing is shown as Drawing 1.

**Drawing 1.** An Example from Children's Drawings

*Codes from drawing:* Tree, human, tent, eagle, bird, cloud, heart, sun, butterfly, grass, spider, dog

**Findings Obtained from the Interviews**

The greatest limitation related to the interviews was the difficulty of locating the sentences created by the children into a context due to their age. In general, situations such as short sentences formed and mentioning various topics that destroys the coherence were frequently experienced during the interviews. As a result, shortness of the direct quotations made increased the limitation as well. When the interviews conducted with the children were analyzed, a total of 149 codes were elicited from 32 children. The raw states of the themes constructed for these codes are presented in Graph 1.




**Graph 1.** Raw data matrix of themes obtained from MAXQDA (Trial Version)

As can be seen in Graph 1, the 149 codes were gathered under 7 themes. The Graph presents a matrix. Accordingly, the thick lines represent the power of the relationship between the themes, and the size of the symbol points belonging to the themes represents largeness of the number of codes in it. According to this, it is observed that children who take education in the forest school have defined the school as primarily related to nature. In addition, the children also emphasized that they feel good at school. Another remarkable finding is that children have a very low perception that school activities are carried out in an academic environment. According to the themes obtained, the experiences of children in the study group can be grouped under various headings.

***The Place Where Interaction with Nature Occurs***

On the basis of the data obtained from the interviews, a total of 46 codes were found under the theme of nature. The children were found to be assigning meanings to school in their responses given to the questions "What comes to your mind when you hear the word "school"?, What does school mean to you?". Codes such as forest, trees, mud, insects, and squirrel were the codes repeated during the interviews. Responses given by some students are as follows: *"When I hear the word "school" what comes to my mind first is the tree, and then walking in the forest."* and *"There are insects, squirrels in the school. Moreover, there are trees."* Particularly the forest was found to be frequently used as a code. Some children tended to replace the word "school" with the word "forest school": *"The word "school" reminds me of our forest school. Forest comes to my mind, there are trees. That is, the forest school."* Thus, it can be thought that the children perceive the forest as a place and more importantly they experience the forest as an environment of learning. Furthermore, animal species are also involved in their experiences. *"What comes to my mind is rabbits, squirrels."*

***The Place Where Feeling Well***

Another theme frequently emphasized by the children is the theme of a place where the children feel good. All of the children interviewed stated that they feel good in the school. The dialogue with one of children is a good example of this:

I: How do you feel in the school?

C: Good and happy.

I: Nice. What makes you feel good and happy?

C: I am happy here because I am always playing in the forest. This makes me happy.

I: Are there other things that make you feel good and happy? Or just playing and being in the forest?

C: There are some other things that make me happy; there is Kahve and Dossy (the dogs of the school). They are wonderful. And playing with the mud also makes me happy.

As can be understood from the example given above, the general structure of the school leads to arousal of positive feelings in the children. "*I feel good here because playing is nice, we are climbing trees."* Many more examples like this can be given. The most important finding here is that the school gives rise to positive feelings in all the children and the main reasons causing these positive feelings are the basic tenets of the forest school such as open air and playing freely.

***Play as a Means of Learning***

The codes gathered under this theme were selected from among the opinions emphasizing the importance of playing and realization of learning by means of playing. "*I am playing in the school. I am playing with the mud, I am playing with trees, and I am learning*." "*Playing in the forest is wonderful. I am learning in the forest. I am having fun."* Moreover, playing on its own emerges as an experience frequently lived by the children within the phenomenon of school. "*I am playing in the forest school."* ; *"I am very happy because I am playing."* ; *"I am very good*

*and energetic because I am playing."* For the researchers this finding is of special importance. The establishment of a play-based learning approach is very important in terms of pre-school education. In the forest school, the children can directly experience this.

***The Place Where a lot of Activities are Done***

During the interviews conducted with the children, it was elicited that what comes to their minds when they hear the word "school" is the activities done in the school. From the statements of the children in the study group, it was concluded that the activities they do in the school make up important experiences within the concept of school. *"There are activities in the school."* ; *"What the word "school" reminds me of is activities."; "Activities are done in the school. We are doing a lot of activities. I am having fun."* Moreover, all of these activities were associated with nature in the children's experiences. When the children were asked what these activities are or what they are doing in these activities, some of them responded as follows: *"There is a climbing wall, we are climbing trees, we are playing with the mud";* "*Eating in the forest and drawing; they are wonderful."* One of the children complained about the multitude of the activities; *"Sometimes there are a lot of activities and I feel exhausted."*

***Friends and Friendship***

One of the remarkable themes emerging during the interviews is friends and friendship. Some children stated that what comes to their minds when they hear the word "school" is friends and friendship and that establishing friendships make them very happy. *"I have friends in the school. I love them."*; *"When I hear the word "school", what comes to my mind is A…."* Within this concept of friendship are there the dogs of the school, Kahve and Dossy.; *"There is Kahve and Dossy. I really like them."* Some other children also expressed opinions about their friendship with the animals of the school.

***Sense of Discovery***

During the interviews, some children remarked that when they hear the word "school", what comes to their minds is making discovery. *"Making discovery in the forest is very enjoyable."*; *"The word school reminds me of discovery."* and *"There are some discoveries we make in the school. The school reminds me of discovery."*

***Education and Instruction (Academic)***

Some of the children in the study group emphasized that when they hear the word "school", what comes to their minds is academic education. *"What comes to my mind is mathematics."*; *"(…) what comes to my mind is homework. Our teachers are teaching us, we are growing."*; *"What comes to my mind is courses; there are courses in the school."*

When all the findings are considered, the experiences of the children attending a forest school in relation to the phenomenon of school can be summarized as follows: a place where direct interactions can be established with nature in open air, a lot of activities are done, stronger friendship relations can be established; even animals can be seen as friends, and the sense of

discovery is promoted. The codes obtained from both the drawings and the interviews seem to support these experiences of the children.

## Discussion and Conclusion

The current study was conducted to determine how the pre-school children enrolling in a forest school experience the concept of school. When the findings obtained from the drawings of the children and from their responses to the question "What is school?" were examined, it was observed that the children's concept of school is shaped around biotic factors (tree, flower, grass and animals) and abiotic factors (cloud and sun). Interestingly, the children also depicted natural events such as rain, wind and rainbow and instead of closed places as the elements of artificial environment, they drew tent and sand pit. The data obtained from the interviews also support this finding. It was determined that the children mostly assign nature-related meanings to the concept of school. What comes to the minds of the children when they hear the word "school" was found to be elements such as forest, trees, mud, insects, squirrel etc. It is seen that special emphasis was put on the forest. In this connection, it is thought that the children perceive the forest as a place and more importantly experience the forest as a learning environment. Moreover, different animal species are involved in their school experiences.

One of the most important principles of nature-based approaches such as the forest school is to strengthen children's bond with nature (Ernst & Theimer, 2011; Otto & Pensini, 2017). Children who love and protect the natural environment also learn many things about ecosystem in their learning processes in nature (Cheng & Monroe, 2012; Kossack & Bogner, 2012). In a report published by the Organization for Economic Cooperation and Development (OECD) (2001), it was stated that the relationship between children and the natural environment should form the basis of all early childhood education approaches. In this context, it is an expected result that the children participating in the present research associate their school experiences with the natural environment. In the learning process in the forest school, children are engaged in many experiences associated with a natural environment such as exploring the habitats of many reptiles and insects such as worm and ant, getting to know many species of trees and plants, observing the life cycles of all the living things in nature and witnessing the traces of different seasons. It has been discussed in many studies that this process experienced by children causes them to have more positive and protective attitudes towards nature and to increase their environmental knowledge (Chawla, 1988; Phenice & Griffore, 2003). However, the time spent by children in nature is very limited due to reasons such as increasing traffic problems, distorted urbanization and reduction of green areas (Clements, 2004; Louv, 2010). At this point, it would not be wrong to say that the responsibility for increasing the time spent in nature by children qualitatively and quantitatively should be assumed by schools (Malone & Tranter, 2003). However, as noted by Davis (1998), the time spent in nature should not be perceived as "just spending time", but also the effective bonds to be established by children with nature should be supported and environmental education should be integrated into existing learning processes. In this context which the current study was conducted, children associated the school with a variety of natural elements. This also implies that forest school pedagogy often provide opportunities children to meet with nature and in this regard, environmental education is already integrated existing daily routines, curriculum and learning process of children.

Another remarkable finding from the interviews conducted with the children is that they associate the concept of school with feeling good. All of the children frequently emphasized that they feel good in the school. This is because they feel very happy while playing, they love playing with Kahve and Dossy (the dogs of the school) and with mud, they enjoy themselves very much while climbing trees. The most important finding here is that the school leads to arousal of positive feelings in the children and the main reasons causing these positive feelings are the basic tenets of the forest school such as open air and playing freely (Knight, 2009). In forest schools, there is a holistic approach to children's development and learning. It aims to maximize the potential of each child in their intellectual, emotional, social and physical spheres with the learning processes they experience by discovering, researching and, most importantly, by having fun (Knight, 2013; Maynard, 2007). Every child in the forest school takes the responsibility of their own learning and reflects their originality and competence with their own way of thinking, feeling and practice in the forest where they spend time almost every day. In other words, the forest school supports their self- development, taking into account the individual differences of children (Knight, 2012; Williams-Siegfredsen, 2017; O'Brien, 2009). The fact that all the children participating in the current study feel good in the forest school can be based on the grounds discussed above.

Another important finding from what the children expressed about school is related to their learning by playing in this school. The children's associating the school with play in the forest school is of special importance to the current research. The fact that a play-based learning approach is rooted in forest schools is an indication that the forest school approach adopts an important principle of developmentally appropriate early childhood education practices (Bredekamp, 2014; Bredekamp & Copple, 1997). Another element of the forest school approach is that it allows children to play outside in natural environments. The forest offers children a space where they can move freely and have fun (Ridgers, Knowles & Sayers, 2012). Bilton (2002) stated that movement is the most natural and important way to learn for children. With the numerous opportunities to move they offer, forest schools are ideal not only for physical games but also for fantasy games that will increase children's imagination and creativity (O'Brien & Murray, 2007; Ouvry, 2003). The natural learning center that the forest offers to children allows children to become more creative in their games (FjØrtoft, 2001); what differentiates this from the experience of playing in any outside place is the natural environment in which children play because the learning center in the forest constantly renews itself and offers opportunities for new and creative games (Kahriman- Pamuk, 2019). Playing in natural environments such as forest supports all areas of development and at the same time free play; in other words, the play in which children play without adult support or intervention, enables them to learn in the background and supports their learning (Rivkin, 1995; Sobel, 2014; Wood & Attfield, 2005). Besides free play, the forest school approach is ideal for children to experience many semi-structured and structured activities. In forest schools, activities covering different learning areas such as language, readiness for reading and writing, mathematics and science can be carried out (Cevher-Kalburan, 2019; Knight, 2009; Maynard, 2007). The findings of the current research also show that children associate their experiences related to the concept of school with their activities and academic processes as well as play. In this context, the curriculum and practices conducted in forest school are also appropriate for the frame drawn by National Curriculum of Pre-school Education (2013). In other words, the forest school pedagogy provides opportunity for language, mathematics, science etc. activities and learning process for children as offered by national curriculum.

Another important finding of this research is the emphasis of children on friends and friendship. It is noteworthy that children associate the school concept with their friends and that the school's dogs are included among their friends. Supporting children's social development and providing an environment in which they can communicate effectively with their peers is among the principles of pre-school education (Bredekamp, 2014; Niffenegger & Willer, 1998; Wortham, 2002). Forest schools offer children learning environments where they can work together, collaborate and learn sharing, helping and solidarity (Constable, 2012; Knight, 2009; Maynard, 2007, Williams-Siegfredson, 2012).

Waite (2010) emphasized that children's memories about the games they played in the open air are related to their friends. Similarly, Coates and Pimlott-Wilson (2019), in a study on the friendship experiences of children attending a forest school, emphasized that children who attend forest schools enjoy learning together with their peers. Moreover, they emphasized that the learning environment in the forest school increases the peer interaction of children, improves their social and cooperative skills and in such an environment children invest greater efforts to solve conflicts between friends (Coates & Pimlott-Wilson, 2019).

Based on the findings of this research, the last point to be discussed is that children associate school experiences with discovery. In the forest school approach, children are often offered the opportunity to explore in nature. During this exploration, children have the opportunity to examine their environment in depth. During the discovery process, scientific process skills such as making observation, guessing, classification, establishing communication and evaluation are actively used (Knight, 2009). As O'Brien (2009) points out, forest schools are places where children go after their curiosity and explore the life through questioning and exploring. Children are engaged in discovery as a part of the school routines (Cevher-Kalburan, 2019). Therefore, it is an expected result in this research design that children associate school experiences with discovery.

In the current study, it was aimed to understand the experiences of the children receiving their pre-school education in a forest school in relation to the concept of school. In this regard, the most remarkable result is thought to be that the children in the forest school perceive the school as a place and that they experience it as a phenomenon. In addition to this, in the children's school experiences are there biotic and abiotic factors frequently involved while the artificial environment is not frequently involved in their perceptions of the phenomenon of school. In the current study, it has also been revealed that the forest school promotes the development of peer relationships, the nature-child relationship is frequently involved in their daily experiences and the sense of discovery is continuously nurtured. The results of this study also show the importance of the forest school approach as an alternative education approach in the early childhood period as; besides the above-mentioned benefits, it allows the integration of school and learning with fun and play and allows learning and teaching to occur outside the class, within nature. On the basis of all these results, the researchers think that the forest school transforms the school phenomenon, which has a long historical basis as a school model, from pedagogical and sociological point of view. This also emerges as a subject that should be examined by experts from different fields.

Though more systematic and objective research relying on data sources other than the self-report of children is needed to explore forest schools (Maynard, 2007), research focusing on the opinions of all the parts of the forest school mezzo-system such as family, teacher, assistant staff is needed so that a holistic perspective including different viewpoints of the forest school can be

introduced to the literature. On the basis of the data produced by the children about the school phenomenon, it can be concluded that forest schools force the school phenomenon to change in pedagogical and sociological respects and in terms of the evaluation of philosophical opinions about education. This subject is believed to be worth investigating in different disciplines.

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